REMARKS

Reconsideration of the rejections contained in the Office Action is respectfully requested. By this amendment claims 1, 8, and 12 have been amended. Currently, claims 1-16 are pending in this application. A Request for Continued Examination is being submitted concurrently herewith.

Rejection under 35 USC 103

Claims 1-9 and 15 were rejected under 35 USC 103 as unpatentable over Sumida (U.S. Patent No. 4,912,703) in view of Sawada (U.S. Patent No. 5,596,390). This rejection is respectfully traversed in view of the amendments to the claims and the following arguments.

This application relates to a method for selectively reading counter information in a network element. As described by applicants in the background section (see e.g. page 1, lines 19-32) a network element may need to maintain many statistics on various aspects of the traffic that is passing through the network element. Each of these statistics will have a separate counter. Since counters are limited in size by the hardware that is used to implement the network element, the counters need to be read periodically, such as once every .01 second. Reading a large number of counters 100 times per second is a large amount of overhead for the network element processor.

Applicants proposed to count statistics using counters and, when a particular threshold unrelated to time was reached, such as the counter was half full, the counter would set a bit or other type of flag to cause it to be read. (See Specification page 12, line 12 to page 13, line 14) In the specification, applicants state that a "ripeness indicator" "is used to signal to the network device when one or more counters has met or exceeded a predetermined value." Specification at page 2, lines 15-16. Thus, the term "ripeness indicator" specifies when a counter has met or exceeded a predetermined value and relates to the content of the counter itself.

Since it is not possible to know whether the value of a counter has met or exceeded a predetermined value by looking at a clock, a clock by itself cannot be a "ripeness indicator." Specifically, since applicants define the term "ripeness indicator" as relating to the value of one or more counters, and since a clock cannot give the same information, the fact that Sumida discloses using a clock to periodically read counters does not correspond to using "ripeness indicators." Likewise, the fact that Sawada reads counters when a physical sensor registers an

alarm condition does not correspond to the use of "ripeness indicators" since the alarm conditions are unrelated to the value of the counters that are subsequently read. Accordingly, as discussed in greater detail below, neither reference teaches or suggests the use of ripeness indicators.

Applicants have rearranged the terms of claim 1 to make it easier to read. Specifically, applicants have amended claim 1 to recite that the method for selectively reading counter information in a network device includes the step of setting a first ripeness indicator associated with a value of a first counter that contains information associated with a statistic of traffic being handled by the network device, and that the first ripeness indicator indicates that a value of the first counter has reached a particular value. The amended portion of this limitation was formerly set forth in the next method step. Applicants felt that it was clearer to specify that the counter contains information associated with a statistic of traffic where the counter is first introduced.

Applicants have also amended claim 1 to recite that the step of reading the first counter to determine the value of the first counter is performed only after the first ripeness indicator has been set, and that the counter is then read in response to the setting of the first ripeness indicator. The combination of Sumida and Sawada do not teach or suggest that the counter should be read only after the first ripeness indicator has been set.

Sumida teaches a broadcast data transmission station that includes a traffic amount computation means (meter) that is connected to the transmission line to measure the amount of traffic being transmitted on a line during a unit transmission period. (Col. 4, lines 12-18). The traffic computation means may include several counters to measure the amount of traffic that was transmitted during sampling periods that may be shorter than the unit time. (Col. 4, lines 25-29). The broadcast data transmission station measures traffic sent to each of the regions during each sampling period, and then sums the partial traffic numbers to determine how much traffic was broadcast. (Sumida at Col. 4, lines 34-39).

Sumida thus computes the amount of traffic (referred to by Sumida as the "Traffic Amount number Nt" see Sumida at Col. 4, lines 42-44) by adding up the amount of traffic that was handled by the network element during a unit time period such as during the preceding second. Sumida has two ways of measuring this – by looking at only the number of transmission frames that were transmitted during the preceding unit time (Sumida at col. 4, lines 52-55) or by

looking at both the number of frames and the size of the frames that were transmitted during the preceding unit time (Sumida at Col. 5, lines 1-4).

The term "traffic amount number" in Sumida, thus refers to the amount of traffic that has been transmitted by the network element in the preceding unit of time. This is a traffic statistic value which is based on the summation of counters. Periodically Sumida will read this number to determine how much traffic was transmitted. Thus, since Sumida reads the counters based on time, rather than based on the value of the counters, Sumida fails to teach or suggest reading a counter only after the first ripeness indicator has been set, and that the counter is then read in response to the setting of the first ripeness indicator as recited in claim 1.

Sawada fails to make up the deficiencies of Sumida. Sawada teaches that copiers should include various meters and counters (See e.g. Sumida at Col. 6, lines 18-36 and Fig. 2). The values of the counters are stored in memory 14 (Sumida at Col. 7, lines 1-8).

In Sawada, the data communication device 3 controls the copiers 1. (Sawada at Col. 8, lines 43-48) and is responsible for communicating with the controller 2. The communication device will automatically generate a call when requested by one of the copiers (Sawada at Col. 8, line 48-50). This type of communication occurs where there is an alarm condition, i.e. the operator of the copier uses the control panel to initiate a call or when the service is determined to be required (Sawada at Col. 9, lines 18-29).

To determine whether one of the copiers requires service, the data communication device 3 polls the copiers 1 periodically. (Sawada at Col. 9, lines 30-32 "The control (2) is executed by the polling from the data communication device. The word "polling" referes to sequentially designating the copiers 1 in order to see if any one of them has generated a connection request.").

The final way that the data communication device operates is to periodically, i.e. once a day, reading the various counters. (Sawada at Col. 9, lines 41-43).

Thus, in Sawada, the copiers have sensors and counters. If an alarm condition occurs, the copier will generate an alarm which will cause the data communication device to notify the control. Otherwise, the data communication device periodically polls the copiers to obtain the values of their counters, and then these values are provided to the control.

Thus, Sawada does not teach or suggest that there should be a ripeness indicator or other value that specifies when and which counters are to be read. Rather, Sawada reads the counters periodically throughout the day to determine whether one of the copiers is likely to need service

soon and, if so, the control is notified. Additionally, the values of the counters are periodically reported back to the control. These operations are timed and are not based on any sort of ripeness indicator as claimed.

In the rejection, the Examiner focused on Fig. 20 and the associated text at Col. 13, lines 47-61). In Sawada, Fig. 20 shows a statistics and trouble estimation routine to be executed by the CPU 11 of the copier. This routine is called/started when the humidity sensor 115, temperature sensor 114, image density sensor 113 or electrometer 111 generates an alarm (exceeds a particular limit) (Sawada at Col. 13, lines 48-52 and Fig. 2). The electrometer 111 measures the surface potential of the drum. (Sawada at Col. 6, lines 23-27). Thus, this routine is called when one of the physical sensors associated with the copier determines that the copier is not operating normally.

When one of these sensors registers an alarm condition, the copier will read the counter Nn, record the value, compare it with a previous value of the counter (Nn-1) and determine the tendency (tangent) from these two values. (Sawada at Col. 13, lines 48-61).

The humidity sensor 115, temperature sensor 114, image density sensor 113, and electrometer 111, are not reading values of the counter, but rather are reading physical properties of the photocopier. Thus, although an alarm condition by one of these sensors will cause the counter Nn to be read, the alarm conditions are unrelated to the value of the counter. Thus, the alarm conditions cannot qualify as a "ripeness indicator" since they are not triggered by the counter reaching a particular value.

Stated differently, claim 1 recites the steps of setting a first ripeness indicator associated with a value of a first counter that indicates that a value of the first counter has reached a particular value. The humidity sensor 114, temperature sensor 114, image density sensor 113, and electrometer 111, have nothing to do with the value of the first counter and certainly do not indicate that the first counter has reached a particular value.

Claim 1 further recites the step of reading the first counter to determine the value of the first counter only after the first ripeness indicator has been set and in response to the setting of the first ripeness indicator. When combined with the first step, it is clear that the ripeness indicator must be set when the value of the first counter has reached a particular value, and that the value of the first counter is read only after the ripeness indicator has been set. Accordingly, claim 1 recites a method whereby a counter will be read only once the content of the counter has

reached a particular value. Sawada, by contrast, reads the value of the counter regardless of the value of the counter, whenever there is an alarm condition on the printer. These are two very different processes.

As described above, Sawada fails to make up the deficiencies of Samida. Accordingly, the combination of Sumida and Sawada fails to teach each and every limitation of claim 1. Thus, applicants respectfully submit that claim 1, as amended, is patentable over the art of record and respectfully requests that the rejection of claim 1 and those claims dependent thereon be withdrawn.

Non-analogous Art

This application relates to communication networks and, more particularly, to a method and apparatus for selectively reading counter information in a network device. (Specification at page 1, lines 8-9). Sawada relates to photocopiers. A person of ordinary skill in the art would not be motivated to look at how photocopiers keep track of the number of copies and other operating parameters when looking to see how to implement counters within a large network router/switch. Accordingly, in addition to the reasoning set forth above, applicants respectfully submit that Sawada does not qualify as prior art to this application because it is non-analogous.

Claims 12 and 13

In the previous Office Action dated March 13, 2008, the Examiner did not treat claims 12 and 13 on the merits. Applicants pointed this out to the Examiner on page 9 of the Amendment dated August 12, 2008. In the current Office Action dated December 11, 2008, the Examiner has once again not rejected claims 12 and 13 on the merits. Since claim 12 has not been rejected on any prior art reference, applicants have amended claim 12 into independent form and respectfully request that it be allowed.

Conclusion

Applicants respectfully submit that the application is in condition for allowance and an action to this effect is respectfully requested. If there are any questions or concerns regarding the amendments or these remarks, the Examiner is requested to telephone the undersigned at the telephone number listed below.

Extension of Time

Applicant requests a one month extension of time to respond to the Office Action, the fee for which is being paid concurrently herewith. If any additional fees are due in connection with this filing, the Commissioner is hereby authorized to charge payment of the fees associated with this communication or credit any overpayment to Deposit Account No. 141315 (Ref. 16128BAUS01U).

Respectfully Submitted

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